

## Recreational Use Attainability Analysis

### Cover Sheet

Water Body Name: Maline Creek

Water Body Identification #: 1709

#### Completed UAA Checklist:

- Pre-Field Preparatory Data Sheet
- Maps with actual survey sites marked
- Data Sheet A
- Data Sheet B – 3 of 3 pages for each site
  - Number of Sites: 7
- Data Sheet C (if applicable)
  - Number of Interviews: 0
- Photographs
  - Quantities
    - Upstream 6
    - Downstream 7
    - Other 7

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported in this UAA is true and accurate.

Signed: Rebecca Landewe Date: 6/26/06

Printed Name: Rebecca Landewe Telephone #: 913-551-7861

Organization: US EPA Position: Environmental Scientist

Pre-Field Preparatory Data Sheet  
for Recreational Use Stream Surveys

Water Body Name: <u>Maline Creek</u> (from USGS 7.5' quad)	
8-digit HUC: <u>07140101</u>	Missouri Water Body Identification (WBID) #: <u>1709</u>
County: <u>St. Louis</u>	
Upstream Legal Description: <u>Bellefontaine Rd.</u>	<u>Class C</u>
Downstream Legal Description: <u>Mouth</u>	<u>1.0 mile</u>
Discharger Facility Name(s):	
Discharger Permit Number(s):	
Weather Conditions for Past 7 days: <u>Temp: 70s to mid-90s</u> <u>Haze, light rain, 4 0.5 inch rain during week</u>	
County Drought Status: (See MDNR Drought Assessment site for latest maps and information: <a href="http://www.dnr.mo.gov/env/wrc/droughtupdate.htm">http://www.dnr.mo.gov/env/wrc/droughtupdate.htm</a> ) <ul style="list-style-type: none"><li>➤ No drought</li><li>➤ <u>Phase 1 – Advisory Phase</u></li><li>➤ Phase 2 – Drought Alert</li><li>➤ Phase 3 – Conservation Phase</li><li>➤ Unknown</li></ul>	
Date of Map: <u>5 / 30 / 2006</u>	

**Site Locations Map(s):** Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest.

WBID # 1709

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Date: 6/22/06

Field Data Sheets for Recreational Use Stream Surveys

**Data Sheet A - Water Body Identification**

Water Body Name: <u>Maline Creek</u>
WBID #: <u>1709</u>
Upstream Coordinates: <u>N 38.73633</u> (WGS 84, ddd.ddddd) <u>W 90.22487</u>
Downstream Coordinates: <u>N 38.7278</u> (WGS 84, ddd.ddddd) <u>W 90.21917</u>
Current Weather Conditions: <u>Mostly Cloud, 80% cover, mid-80s, light wind</u>
Number of Sites Evaluated: <u>7</u>
Name(s) of Surveyor(s): <u>Gary Welker, Jay Hua, Rebecca Landewe</u>

Date: 6 / 22 / 06

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B - Site Characterization – 1 of 3**  
(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>N 38.73633</u>	Arrival Time: <u>3:20</u>
Longitude (ddd.dddd): <u>W 90.22487</u>	
Photo Ids: Upstream: <u>2716</u> Downstream: <u>2715</u> Other: <u>2718 - ditch</u>	

**Narrative Description of Location:** (Describe access point to stream, nearby roads, landmarks, etc.)

Lined channel approx. 75m from Bellefontaine Rd. Bridge

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input checked="" type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input checked="" type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input checked="" type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

**Human Uses Observed\*:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

**Evidence of Human Use\*:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

**Sources of Pollution:** (e.g., trash dumping, tires, drainages, discharges, etc.)

Drainage 2718

WBID # 1709 Site # 1

4

Date:      /      /     

## Data Sheet B - Site Characterization - 2 of 3

## Stream Morphology:

## Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run	75m	12		0.05	0.05
<input type="checkbox"/> Pool					
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Velocity (ft/sec):		

## Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run	75m	12		0.05	0.05
<input type="checkbox"/> Pool					
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Velocity (ft/sec):		

Substrate\*: (These values should add up to 100%.) Other: Rip-rap

% Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock

Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

100% algae growth covering rip-rap
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Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: <u>Algae</u>
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Fish, crayfish

WBLD # 1709 Site # 2

Date: 6 / 22 / 06

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet B - Site Characterization - 1 of 3

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>N 38.73586</u>	Arrival Time: <u>3:25</u>
Longitude (ddd.dddd): <u>W 90.22411</u>	
Photo Ids: Upstream: <u>2720</u> Downstream: <u>2721</u>	Other: <u>2719</u> <u>Pipe 2717</u>

## Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)

Approx. 100 m downstream of Bellefontaine Rd  
~25 m downstream of Site 1

## Surrounding Conditions\*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input checked="" type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Concrete wall</u> <u>Riprap</u>	

## Human Uses Observed\*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

## Evidence of Human Use\*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

## Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

Pipe 2717

WBID # 1709 Site # 2

4

Date: 6/22/06

## Data Sheet B - Site Characterization - 2 of 3

## Stream Morphology:

## Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool		13.5	15	0.7, 0.7, 0.6 = 2.0 0.66	0.7
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Velocity (ft/sec):		

## Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run		13	40	0.8, 1, 0.8 = 2.6 0.86	1.0
<input type="checkbox"/> Pool					
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Velocity (ft/sec):		

## Substrate\*: (These values should add up to 100%.)

US	10 % Cobble	% Gravel	% Sand	% Silt	90 % Mud/Clay	% Bedrock
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## Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

Algae
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## Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Other: Anaerobic sediments
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Warm water temp

WBD # 1709 Site # 3

Date: 6/22/06

### Field Data Sheets for Recreational Use Stream Surveys

#### Data Sheet B - Site Characterization - 1 of 3 (A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>N 38.73496</u>	Arrival Time: <u>3:45</u>
Longitude (ddd.dddd): <u>W 90.2233</u>	
Photo Ids: Upstream: <u>2722</u> Downstream: <u>2723</u>	Other: <u>2724</u>

#### Narrative Description of Location: (Describe access point to stream, nearby roads, landmarks, etc.)

#### Surrounding Conditions\*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input checked="" type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Concrete wall</u> <u>rip-rap</u>	

#### Human Uses Observed\*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

#### Evidence of Human Use\*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

#### Sources of Pollution: (e.g., trash dumping, tires, drainages, discharges, etc.)

trash Photo  
Ripe 2724



WBID # 1709 Site # 3

4

Date: 6/22/06

## Data Sheet B - Site Characterization - 2 of 3

## Stream Morphology:

## Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool		18	40	$0.5, 0.8, 0.6 = 1.9$ 0.63	0.8
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Velocity (ft/sec): <u>slow</u>		

## Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool		17	46	$0.5, 1.0, 0.7 = 2.2$ 0.73	1.0
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Velocity (ft/sec): <u>slow</u>		

## Substrate\*: (These values should add up to 100%.)

% Cobble	<u>5</u>	% Gravel		% Sand		% Silt	<u>95</u>	% Mud/Clay		% Bedrock	
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## Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

<u>Algae, paraphyton</u>
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## Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Fish, Crawdads

WBID # 1101 Site # 5

5

Date: 6 / 22 / 06

### Data Sheet B - Site Characterization – 3 of 3

**Comments:** Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

Light sprinkle < 5 min. duration

WBID # 1709 Site # 4

3

Date: 6 / 22 / 06Field Data Sheets for Recreational Use Stream Surveys**Data Sheet B - Site Characterization - 1 of 3**  
(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>N 38.73301</u>	Arrival Time: <u>4:05pm</u>
Longitude (ddd.dddd): <u>W 90.22153</u>	
Photo Ids: Upstream: <u>2727</u> Downstream: <u>2728</u>	Other: <u>Oil sheen 2725</u> <u>Pipe 2726</u>

**Narrative Description of Location:** (Describe access point to stream, nearby roads, landmarks, etc.)

<u>Upstream of bend in channel</u> <u>Below pipe outfall</u>
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**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input checked="" type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Concrete wall</u>	

**Human Uses Observed\*:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

**Evidence of Human Use\*:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

**Sources of Pollution:** (e.g., trash dumping, tires, drainages, discharges, etc.)

<u>Pipe (pic 2726)</u>
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WBID # 1709 Site # 4

4

Date: 6 / 22 / 06

### Data Sheet B - Site Characterization - 2 of 3

#### Stream Morphology:

##### Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run		18	50	0.4, 0.5, 0.4 = 1.2 0.43	0.5
<input type="checkbox"/> Pool					
<input checked="" type="checkbox"/> Flow Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec): <u>slow</u>					

##### Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run				0.7, 0.6, 0.5 = 1.8 0.6	0.7
<input checked="" type="checkbox"/> Pool				0.9, 1.3, 0.8 = 3.0 1.0	1.3
<input checked="" type="checkbox"/> Flow Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec): <u>slow</u>					

#### Substrate\*: (These values should add up to 100%.)

% Cobble	<u>10</u>	% Gravel		% Sand		% Silt	<u>80</u>	% Mud/Clay	<u>10</u>	% Bedrock	
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#### Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

<u>Algae</u>
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#### Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

WBID # 1709 Site # 5

3

Date: 6 / 22 / 06Field Data Sheets for Recreational Use Stream Surveys**Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>Poor coverage</u>	Arrival Time: <u>4:30</u>
Longitude (ddd.dddd):	
Photo Ids: Upstream: <u>2729</u> Downstream: <u>2730</u>	Other: <u>2731 - Dam Graffiti</u>

**Narrative Description of Location:** (Describe access point to stream, nearby roads, landmarks, etc.)

<u>Upstream of concrete lined portion approx. 75m + pipe outfall</u>
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**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Concrete wall</u>	

**Human Uses Observed\*:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

**Evidence of Human Use\*:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Graffiti downstream on concrete lined portion</u>				

**Sources of Pollution:** (e.g., trash dumping, tires, drainages, discharges, etc.)

<u>Pipe outfall</u>
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WBID # 1709 Site # 5

Date: 6/22/06

# Data Sheet B - Site Characterization - 2 of 3

## Stream Morphology:

### Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool				0.8, 1.2, 1.1 = 3.1 1.03	1.1
<input type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

### Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input checked="" type="checkbox"/> Pool				1.3, 1.0, 1.1 = 3.4 1.13	1.3
<input type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

### Substrate\*: (These values should add up to 100%.)

10 % Cobble	% Gravel	45 % Sand	45 % Silt	% Mud/Clay	% Bedrock
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### Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

Algae
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### Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.

Ducks

WBID # 1709 Site # 6

3

Date: 6/22/06Field Data Sheets for Recreational Use Stream Surveys**Data Sheet B - Site Characterization – 1 of 3**  
(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>N 38.72849</u>	Arrival Time: <u>4:50</u>
Longitude (ddd.dddd): <u>W 90.22024</u>	
Photo Ids: Upstream: <u>2732</u> Downstream: <u>2733</u>	Other:

**Narrative Description of Location:** (Describe access point to stream, nearby roads, landmarks, etc.)North of Riverview Dr. bridge crossing.**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input checked="" type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>concrete trapezoidal</u>	

**Human Uses Observed\*:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input checked="" type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Graffiti

**Evidence of Human Use\*:**

<input checked="" type="checkbox"/> Roads <u>Riverview</u>	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

**Sources of Pollution:** (e.g., trash dumping, tires, drainages, discharges, etc.)Outfall, drainage, pump station, road runoff

WBID # 1709 Site # 6

Date: 6/22/06

# Data Sheet B - Site Characterization - 2 of 3

## Stream Morphology:

### Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run		6	15	0.3, 0.4, 0.2 = 0.3	0.4
<input type="checkbox"/> Pool					
<input type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

### Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run				0.1	0.1
<input type="checkbox"/> Pool					
<input type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

Substrate\*: (These values should add up to 100%) <sup>PS</sup> 5% Gravel 5% Sand 90% Cobble

% Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock
100					

Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

Algae

### Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

\*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that affect another use.



WBID # 1709 Site # 7

3

Date: 6 / 22 / 06Field Data Sheets for Recreational Use Stream Surveys**Data Sheet B - Site Characterization – 1 of 3**

(A separate Data Sheet B must be completed for each site)

Latitude (ddd.dddd): <u>N 38.7218</u>	Arrival Time: <u>5:00pm</u>
Longitude (ddd.dddd): <u>W 90.21917</u>	
Photo Ids: Upstream:	Downstream: <u>2734</u>
Other:	

**Narrative Description of Location:** (Describe access point to stream, nearby roads, landmarks, etc.)DS of Riverview Dr.**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input checked="" type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

**Human Uses Observed\*:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)				

**Evidence of Human Use\*:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

**Sources of Pollution:** (e.g., trash dumping, tires, drainages, discharges, etc.)

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WBID # 101 Site # 1Date: 6/22/06

## Data Sheet B - Site Characterization - 2 of 3

## Stream Morphology:

## Upstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input type="checkbox"/> Run					
<input type="checkbox"/> Pool					
<input type="checkbox"/> Flow Present? <input type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

## Downstream View Physical Dimensions:

	Distance from access point (m)	Width (m)	Length (m)	Avg. Depth (m)	Max Depth (m)
<input type="checkbox"/> Riffle					
<input checked="" type="checkbox"/> Run		18		0.1, 0.2, 0.1 = 0.13	0.2
<input type="checkbox"/> Pool					
<input checked="" type="checkbox"/> Flow Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Velocity (ft/sec):					

## Substrate\*: (These values should add up to 100%.)

80 % Cobble	15 % Gravel	5 % Sand	% Silt	% Mud/Clay	% Bedrock
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## Aquatic Vegetation\*: (Note amount of vegetation or algal growth at the assessment site.)

Algae
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## Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

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WBID # 1711 Site # 7

Date: 6 / 22 / 06

**Data Sheet B - Site Characterization – 3 of 3**

**Comments:** Please describe any departures from protocol and the reasons for departure (e.g., unanticipated unique local conditions, problems in measuring, site relocation).

Thunderstorms moved into area & began to rain as site measurements  
were finished.

# Maline Creek WBID# 1709 Recreational UAA Photographs

St. Louis County  
June 22, 2006

## Overview

- 7 sites
- Phase 1 Drought Advisory

Survey Point	Depth (m)	
	Average	Maximum
1 US	0.05	0.05
1 DS	0.05	0.05
2 US	0.66	0.70
2 DS	0.86	1.00
3 US	0.63	0.80
3 DS	0.73	1.00
4 US	0.43	0.50
4 DS	0.60	0.70
4 DS	1.00	1.30
5 US	1.03	1.10
5 DS	1.13	1.30
6 US	0.30	0.40
6 DS	0.10	0.10
7 US	0.13	0.20

## Site 1 – Upstream



## Site 1 – Downstream



## Site 1 – Drain



## Site 2 – Upstream





## Site 2 – Pipe



## Site 2 – Downstream



## Site 3 – Upstream



## Site 3 – Pipe





## Site 3 – Downstream



## Site 4 – Upstream



## Site 4 – Downstream



## Site 4 – Other



## Site 5 – Upstream



## Site 5 – Downstream





## Site 5 – Dam



## Site 6 – Upstream



## Site 6 – Downstream



## Site 7 – Downstream

